



GUIDELINES

GUIDELINE G.03 – Construction Requirements for Special Fire Protection Areas

G.03.1 PURPOSE

The purpose of this guideline is to assist architects, developers, homeowners and others in understanding the City of Newport Beach regulations for structures built adjacent to wildland areas. To view the precise regulations, please see the Newport Beach Municipal Code, Title 9 the California Building Code, Chapter 7A and The California Fire Code, Chapter 3.

G.03.2 SCOPE

These regulations shall apply to all new construction, re-construction, and additions to structures located on parcels of land adjacent to the City of Newport Beach Special Fire Protection Areas, which directly abut wildland space or a designated Fuel Modification Zone on one or more sides.

Exceptions:

- A. Additions of less than 50% of the square footage of the existing structure are not required to comply with the requirements for automatic sprinklers found in Section 320.7.1, unless automatic fire sprinklers are required by other sections of the code, or unless the existing structure is already equipped with automatic sprinklers.
- B. One story detached accessory buildings used as tool and storage sheds, playhouses and similar uses may be exempt from the requirements of this section provided all the following are met: (a) the accessory building floor area does not exceed 120 square feet, (b) the accessory building is not located less than 5 feet from all property lines and not less than 10 feet from other structures, and (c) the backyard complies with and is maintained in accordance with Zone A requirements for “fuel modification zones”.

G.03.3 DEFINITIONS

- **EXPOSED SIDE:** The exposed side of the structure is defined as the exterior wall or walls which face adjoining wildland space or a designated fuel modification zone. (320.2 2007 **CBC**, 9.04.030 **NBMC**)
- **RECONSTRUCTION:** Any building undergoing construction within any 2-year period, in which the floor area of reconstruction is 50 percent or more prior to the submittal of a building permit application, shall comply with the Building and Fire Code provisions for new construction. (320.2 2007 **CFC**, 9.04.030 **NBMC**)



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- **ROOF ASSEMBLY:** Any system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and the roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly includes the roof deck, vapor retarder, substrate or thermal barrier, insulation, vapor retarder and roof covering. (1502.1 2007 **CBC**)
- **ROOF COVERING:** The covering applied to the roof deck for weather resistance, fire classification or appearance. (1502.1 2007 **CBC**)
- **ROOF DECK:** The flat or sloped surface not including its supporting members or vertical supports. (1502.1 2007 **CBC**)
- **SPECIAL FIRE PROTECTION AREAS:** Any geographical area, designated by the Fire Chief, in which structures directly abut wildland space or a fuel modification zone on one or more sides. Special Fire Protection Areas include, but are not limited to, Very High Fire Hazard Severity Zones. (320.2 2007 **CFC**, 9.04.030 **NBMC**)
- **UNENCLOSED STRUCTURE:** Includes structures with a roof and no more than one side enclosed. (320.2 2007 **CFC**, 9.04.030 **NBMC**)
- **VERY HIGH FIRE HAZARD SEVERITY ZONE:** A geographical area designated in accordance with the California Government Code, Section 51178, which contains the type and condition of vegetation, topography, weather and structure density which potentially increases the possibility of wildland conflagration fires. (320.2 2007 **CFC**, 9.04.030 **NBMC**)

G.03.4 PROCEDURE

1. Roof

- Class A roof assembly, listed and identified by an approved testing agency is required. Wood roof covering is not allowed regardless of classification. (15.04.290 **NBMC**)
- Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be fire stopped with approved materials or have one layer of No. 72 ASTM cap sheet installed over the combustible decking. (704A.1.2 2007 **CBC**)
- All rain gutters must be screened to resist the intrusion of leaves or debris to accumulate in the gutter. (704A.1.5 2007 **CBC**)



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- Skylights shall have noncombustible frames glazed with dual glazing of heat strengthened or fully tempered glass or shall be a three-fourths hour fire resistive assembly. (320.7.4 2007 **CFC**)
- Attic ventilation openings are prohibited on the exposed side(s) of the structure. (320.7.5 2007 **CFC**) Where allowed elsewhere on the structure, roof and attic vents shall resist the intrusion of flame and embers into the attic area of the structure or shall be protected by corrosion-resistant, noncombustible wire mesh with ¼-inch openings or equivalent. (704A.2 2007 **CBC**)
- Eaves and soffits shall be protected by ignition-resistant materials or noncombustible construction on the exposed underside. (704A.2.3 2007 **CBC**)

2. Exterior Walls

- All exterior walls shall be approved noncombustible or ignition-resistant material, heavy timber or log wall construction. (704A.3.1 2007 **CBC**)
- All exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2-inch nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure. (704A.3.1.1 2007 **CBC**)
- Wall ventilation openings are prohibited on the exposed side(s) of exterior walls and foundations. (320.7.7 2007 **CFC**) Where allowed elsewhere on the structure, wall vent openings on exterior walls shall resist the intrusion of flame and embers into the structure or shall be protected by corrosion-resistant, noncombustible wire mesh with ¼-inch openings or equivalent. (704A.3.2.1 2007 **CBC**)
- All Exterior windows, window walls, glazed doors, and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane, or glass block units, or have a fire-resistive rating of not less than 20 minutes when tested in accordance to ASTM E 2010. (704A.3.2.2 2007 **CBC**)
- All exterior door assemblies shall conform to the performance requirements of standard SFM 12-7A-1 or shall be of approved noncombustible construction, or solid wood having stiles and rails not less than 1 3/8 inches thick with interior field panels no less than 1 ¼ inches thick, or shall have a fire-resistive rating of not less than 20 minutes when tested according to ASTM E 2074. **Exception:** Noncombustible or exterior fire-retardant treated wood vehicle access doors (garage doors) are not required to comply with this chapter. (704A.3.2.3 2007 **CBC**)



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3. Decking, Surfaces, Stair Treads, Risers, and Landings of Decks, Porches and Balconies where any portion of such surface is within 10 feet of the primary structure shall comply with one of the following methods (704A.4.1.1 2007 CBC):

1. Shall be constructed of ignition-resistant materials and pass the performance requirements of SFM 12-7A-4, parts A and B.
2. Shall be constructed with heavy timber (min. 4"x6" nominal), exterior fire-retardant-treated wood or approved noncombustible materials.
3. Shall meet the requirements set forth in section 704A.4.1 (3.) of the 2007 CBC.

4. Under Floor Protection

- The underside of cantilevered and overhanging appendages and floor projections shall maintain the ignition-resistant integrity of exterior walls, or the projection shall be enclosed to the grade.
- Buildings shall have all under floor areas enclosed to the grade with exterior walls in accordance with Section 704A.3. **Exception:** *The complete enclosure may be omitted where the underside of all exposed floors, exposed structural columns, beams and supporting walls are protected as required with exterior ignition-resistant material construction or be heavy timber. (704A.4.2.2 2007 CBC)*

5. Open Trellis, Open Patio Covers, Open Shade Structures and Similar Structures Without Roofs, Located on the Exposed Side(s)

- In lieu of heavy timber construction, open trellis, open patio covers, open shade structures, and similar structures may be constructed with wood columns not less than 4 inches in any dimension; wood beams and/or joists not less than 4 inches in width and 6 inches in depth spaced no closer than 24 inches clear; and wood lattice roofs no less than 2 inches in thickness placed on edge and spaced no closer than 6 inches apart. (320.7.9.2 2007 CFC) No combustible structures are permitted within Zones A, B, C, D or E of a Fuel Modification Zone.

6. Unenclosed Attached or Detached Ancillary Buildings and Structures Located on the Exposed Sides(s)

- Unenclosed attached or detached ancillary buildings and structures located on the exposed side shall be constructed of ignition resistant materials or of one hour fire resistive, noncombustible or heavy timber construction. (320.7.9.1 2007 CFC) Roof covering shall be Class A per 15.04.290 NBMC.



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7. Proximity to Property Lines

- New and reconstructed structures shall not be less than five feet from an adjacent property line. **Exception:** *Exterior walls with no openings facing adjoining property are exempt from the requirements of this section provided the exterior side of the wall is constructed of ignition resistant material, one hour fire resistant or heavy timber construction. (320.7.2 2007 CFC)*

8. Automatic Fire Extinguishing Systems

- All new and reconstructed structures located adjacent to Special Fire Protection Areas shall be equipped with an approved automatic fire sprinkler system. (320.7.1 2007 CFC)
Exceptions:
 1. *Private garages or carports used exclusively for parking, 500 square feet or less where the existing structure on the same property is not provided with an automatic fire extinguishing system.*
 2. *Decks and balconies, open trellis, open patio covers, open shade structures and similar structures without roofs.*

9. Fuel Modification Zone

- Provide a complete fuel modification plan in accordance with Fire Department Guidelines G.02.